REMARKS

The present application was filed on September 22, 2000 with claims 1 through 33. Claims 1 through 33 are presently pending in the above-identified patent application.

In the Office Action, the Examiner rejected claims 1, 3, 16-18, 21, 31, and 32 under 35 U.S.C. §102(e) as being anticipated by Park et al. (United States Patent Publication Number 2002/0036993 A1), rejected claims 1, 3-4, 7, 10, 16-18, 21, 23, 26, 31, and 32 under 35 U.S.C. §102(e) as being anticipated by Ludwig et al. (United States Patent Publication Number 2004/0039833 A1), and rejected claims 5-6, 8-9, and 24-25 under 35 U.S.C. §103(a) as being unpatentable over Ludwig et al. The Examiner indicated that claims 2, 11-15, 19-20, 22, 27-30, and 33 would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims.

Independent Claims 1, 7, 16, 21, 23 and 31

Independent claims 1, 16, 21, and 31 were rejected under 35 U.S.C. §102(e) as being anticipated by Park et al. and claims 1, 7, 16, 21, 23, and 31 were rejected under 35 U.S.C. §102(e) as being anticipated by Ludwig et al.

Regarding claims 1, 16, 21, and 31, the Examiner asserts that Park teaches that, if there is some error, a blank data block (erasure data frame) is transmitted to the upper layer...(forwarding erasure data frames with said multimedia data to a PPP layer). The Examiner also asserts that Ludwig discloses that "packets of the unnumbered mode will be released to the next higher layer regardless if a delimiter has been received or not. Herein, as illustrated in FIG. 6, the next higher layer is PPP Layer...(forwarding erasure data frames with multimedia data to a PPP layer)." In the Response to Arguments section of the final Office Action, the Examiner further asserts that Ludwig implies that the PPP packet does include the delimiters (start or end flag) since Ludwig discloses that the RLP sender will also look for the delimiters (start or end flag) of the next higher layer, e.g. PPP (paragraph 82).

Applicants note that, as the Examiner acknowledges, Park teaches that a *blank* data block is transmitted to the upper layer. Erasure frames, however, are not blank data blocks, as would be apparent to a person of ordinary skill in the art. The present disclosure teaches that, "when the multiplex sub-layer detects a *corrupted data block*, the multiplex sub-layer classifies the block as an *erasure block"* (page 6, lines 25-26; emphasis added); the present disclosure, therefore, defines erasure as ***corrupted***. Similarly, United States Patent Application Number 09/668,242 entitled

"Complete User Datagram Protocol (CUDP) for Wireless Multimedia Packet Networks Using Packet Level Forward Error Correction (FEC) Coding," incorporated by reference in the present disclosure, teaches that, "if a *physical frame is corrupted*, the *payload within the frame* is represented as a set of *erasures*." (Page 8, lines 15-16; emphasis added.) Thus, blank data blocks are not erasure frames.

Applicants also note that a blank data block is ***not*** an erasure data frame replaced with a predefined binary value. Blank is defined as *containing no information; not completed or filled in* (see, dictionary.com). Park, therefore, does not disclose or suggest replacing an *erasure data frame with a predefined binary value.*

Thus, Park does not disclose or suggest forwarding erasure data frames with *multimedia data* to a PPP layer, replacing said *erasure data frames with a predefined binary value*, or processing said multimedia data to determine if said multimedia data is properly received; and communicating *error information* between said RLP and UDP layers.

Applicants also note that Ludwig teaches that "the IP datagram is passed to the link layer, where a header associated with the link layer protocol (LLP), e.g. the Point-to-Point Protocol (PPP), is added. The resulting packet is often called a *frame*." (Paragraph 7; emphasis added.) Ludwig then teaches that the frame also receives a start flag and an end flag. The PPP level packet or frame does not, however, include the start flag or the stop flag. If a start flag or stop flag is corrupted, the PPP frame is ***not*** corrupted since the flag(s) are not part of the frame. Thus, the frames that are associated with corrupted start or stop flags are ***not*** *erasure frames* since the frames have no errors. Since frames with corrupted start or stop flags are not erasure frames, Ludwig does not suggest or disclose forwarding erasure data frames with *multimedia data* to a PPP layer. Ludwig also does not disclose or suggest replacing said *erasure data frames with a predefined binary value*, or processing said multimedia data to determine if said multimedia data is properly received; and communicating *error information* between said RLP and UDP layers.

Regarding the Examiner's assertion that Ludwig implies that the PPP packet includes the delimiters (start or end flag), Applicants note that, in the text cited by the Examiner, Ludwig simply teaches that the "RLP sender will also look for the delimiters of the next higher layer." (Paragraph 82.) Contrary to the Examiner's assertion, this statement only implies that there are delimiters of the next higher layer; it does not teach if the delimiters are part of the PPP frame. As noted above, Ludwig teaches that a ***frame*** is the packet that results from adding a header associated

with the link layer protocol to an IP datagram (paragraph 7). Ludwig then teaches that "the frame also receives a start flag and an end flag" (paragraph 7); Ludwig is clearly acknowledging that the packet is a frame prior to the addition of the start and end flag.

In addition, in the text cited by the Examiner (paragraph 82), Ludwig teaches to duplicate every higher layer delimiter. Applicants note that the higher layer delimiters are not disclosed to be the flags added to the frame (as described in paragraph 7). Thus, Ludwig does not disclose or suggest that the higher layer delimiters are start or stop flags, that the higher layer delimiters are used for error detection or that the duplicated delimiters are used for error detection.

Finally, contrary to the Examiner's assertion, Applicants could find no disclosure or suggestion to replace erasure data frames with a predefined binary value in the text cited by the Examiner (paragraph 81 in regard to claim 7).

Independent claims 1 and 21 require forwarding *erasure data frames* with said *multimedia data* to a Point-to-Point Protocol (PPP) layer, independent claims 7 and 23 require replacing said *erasure data frames with a predefined binary value*, and independent claims 16 and 31 require processing said multimedia data to determine if said multimedia data is properly received; and communicating *error information* between said RLP and UDP layers.

Thus, Park et al. or Ludwig et al., alone or in combination, do not disclose or suggest forwarding erasure data frames with said multimedia data to a Point-to-Point Protocol (PPP) layer, as required by independent claims 1 and 21, do not disclose or suggest replacing said erasure data frames with a predefined binary value, as required by independent claims 7 and 23, and do not disclose or suggest processing said multimedia data to determine if said multimedia data is properly received; and communicating error information between said RLP and UDP layers, as required by independent claims 16 and 31.

Dependent Claims 2-6, 8-15, 17-20, 22, 24-30 and 32-33

Dependent claims 3, 17-18, and 32 were rejected under 35 U.S.C. §102(e) as being anticipated by Park et al., claims 3-4, 10, 17-18, 26, and 32 were rejected under 35 U.S.C. §102(e) as being anticipated by Ludwig et al., and claims 5-6, 8-9, and 24-25 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ludwig et al.

Claims 2-6, 8-15, 17-20, 22, 24-30 and 32-33 are dependent on claims 1, 7, 16, 21, 23, and 31, respectively, and are therefore patentably distinguished over Park et al. and Ludwig et al. (alone or in combination) because of their dependency from independent claims 1, 7, 16, 21, 23, and 31 for the reasons set forth above, as well as other elements these claims add in combination to their base claim. The Examiner has already indicated that claims 2, 11-15, 19-20, 22, 27-30, and 33 would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims.

If any outstanding issues remain, or if the Examiner has any further suggestions for expediting allowance of this application, the Examiner is invited to contact the undersigned at the telephone number indicated below.

The Examiner's attention to this matter is appreciated.

Respectfully submitted,

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